IN THE ABSTRACT:

Binding assays which identify compounds that specifically bind or which modulate (inhibit or enhance) the specific binding of a ligand (e.g., bitter compound such as cycloheximide) to a T2R polypeptide are provided. These binding assays include immunologic binding assays, competitive binding assays, non-competitive assays and preferably include the use of labels such as radionuclides, chemiluminescent labels, fluorescent labels, enzyme labels and the like. These binding assays are useful in identifying compounds that putatively elicit or modulate (inhibit or enhance) bitter taste in human subjects, e.g. bitter taste blockers. The effect of compounds identified in the subject binding assays on bitter taste may be further evaluated in human taste tests. These compounds are potentially useful as taste modulators and as additives or flavorants in compositions for animal or human consumption.